BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Redevelopment of Spectrum to	)	
Encourage Innovation in the	)	**ET Docket No. 92-9**
Use of New Telecommunications	)	
Technologies	)	

COMMENTS OF
TEXAS GAS TRANSMISSION CORPORATION

Pursuant to Section 1.415 of the Commission's rules, Texas Gas Transmission Corporation ("Texas Gas") respectfully submits its Comments on the Notice of Proposed Rule Making (Notice)[1], FCC 92-20, released February 7, 1992, for consideration by the Commission.

I. PRELIMINARY STATEMENT

Texas Gas is a corporation organized and existing under the laws of Delaware, having its principal place of business at Owensboro, Kentucky. Texas Gas is an interstate natural gas company, as defined by the Natural Gas Act, as amended, operating under the jurisdiction of the Federal Energy Regulatory Commission ("FERC") in eight states in the South and Midwest. In connection therewith, it is engaged in the business of producing, purchasing, transporting, and selling natural gas to gas distribution companies, pipeline companies, and industrial users.

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1 Notice of Proposed Rule Making, 57 Fed. Reg. 5993 (February 19, 1992)

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Texas Gas operates a number of radio systems under Part 94 of the Commission's rules in support of its pipeline system, including an extensive long haul private carrier microwave system operating within the frequency bands affected by this proceeding. The private microwave system addresses many unique operational needs of Texas Gas' pipeline system, including but not limited to, high availability remote monitoring, control, and voice networks supporting both routine and emergency communications. Nearly forty years of experience operating these networks in tandem with common carrier networks has demonstrated and continues to demonstrate a critical need for the network characteristics provided by the private system.

In recent years, the utilization of this private system has significantly increased in response to increased pipeline interconnection activity due, in part, to regulatory changes by the FERC. Recent regulatory actions taken by the

FERC will place unprecedented requirements for pipeline monitoring and control on interstate operators.[2] Continued access to appropriate radio spectrum is therefore extremely important to Texas Gas. Accordingly, Texas Gas appreciates this opportunity to submit the following Comments in response to the subject Notice of Proposed Rule Making.

II. SPECTRUM ISSUES

A study performed by the Commission's Office of Engineering and Technology (OET)[3] provides the technical basis for the Commission's proposals. This study was constrained by the Commission to recommend spectrum that would: (1) be accessible to current state-of-the-art mobile equipment, avoiding high development costs, (2) provide sufficient spectrum for substantial growth, (3) contain incumbent users that could be easily relocated, (4) currently fall under FCC jurisdiction to avoid additional delays, and (5) match anticipated international allocations for similar services.[4] Texas Gas suggests that the assumptions on which these five constraints were based, or the OET's interpretation of the constraints themselves, undermine the technical premises underlying the Commissions reserve spectrum proposal.

Mobile technology is not constrained to operations below 3 GHz, as demonstrated by operational systems above 17 GHz (Motorola "data PCS") and

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2 Final Rule, FERC Docket Nos. RM91-11-000, RM87-34-065 (April 8, 1992)

3 "Creating New Technology Bands for Emerging Telecommunications Technology", FCC/OET TS92-1 (January, 1992).

4 Notice pp. 5-6

proposals by companies such as AT&T to deploy PCS services in the common carrier bands above 3 GHz. Spectrum both above and below the 1-3 GHz band is more generally available than the Commission assumes and could be identified through a sufficiently detailed frequency analysis.

The Commission's intent to allocate large blocks of spectrum based on speculative license applications ignores the Commission's own experience in anticipating consumer demand for new services in the case of direct broadcast satellite spectrum allocations.[5]

The difficulty of relocating incumbent licensees from the proposed 2 GHz bands has been seriously underestimated. The significant public safety and environmental protection responsibilities of many incumbents call into question the desirability of even slightly compromising the performance of those microwave systems. Other frequencies considered and discarded in the OET study would seem better candidates in this regard. Instructional Television Fixed Service (ITFS) and other systems operating in the 2500-2690 MHz band could be more easily relocated due to the small number of operational systems and the shorter operating ranges required by those systems. Auxiliary broadcast spectrum in the 1990-2110 MHz band was also discounted although satellite services are already reducing the use of this band for applications such as electronic news gathering.

The Commission's refusal to consider government-held spectrum seems premature, particularly in light of current Congressional action contemplating

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5 FCC Docket No. 80-603 Report & Order, 90 FCC 2ND 676 (June 23, 1982)

release of 140 MHz directly adjacent to the proposed reallocation spectrum.[6] The ultimate role such government spectrum could play should be decided prior to the Commission's final action in this proceeding. Any delay introduced to this proceeding would seem acceptable when compared to the significant public safety and environmental protection issues raised by the proposed relocation.

The Commission gives little information in support of its contention that the frequencies proposed for emerging technologies should match "international developments" None of the systems currently under development in Europe or the Far East are being designed to interoperate nor, absent any unprecedented level of international cooperation, will progress likely be made on this issue.

III. RELOCATION ISSUES

The Commission proposes to make available all common carrier and private carrier bands above 3 GHz to accommodate displaced incumbents while also encouraging those licensees to consider satellite-based alternatives as well as non-radio alternatives such as fiber optic systems.[7] Displaced incumbents will most certainly encounter frequency congestion in many of the urban areas where PCS licensees are likely to build their systems Additionally, most of the 2 GHz long-haul private carrier systems utilize path lengths unsuitable for higher frequencies. Those paths will require additional intermediate repeater stations, increasing cost and reducing reliability. The Commission also maintains that

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6 H.R. 531 "Emerging Telecommunications Technologies Act of 1991"

7 Notice pp. 9-10

existing technical rules for all reaccommodation spectrum will apply.[8] Private carrier access to the common carrier bands will require rechannelization and other technical modifications to accommodate the system requirements of relocated private carriers.

Commercial satellite and optical fiber based networks are not candidates for widespread replacement of long haul systems. As stated earlier, high availability is a key requirement of the existing private carrier systems, one not met by common carrier systems. However, other current network requirements also render satellite and fiber systems unsuitable for widespread accommodation of the 2 GHz incumbents. It is not feasible to construct a private fiber system, due to the extremely high construction and operating costs, nor could any fiber system economically accommodate the network topologies present in many of the private carrier systems. Satellite systems are even more restricted in their applications and can prove prohibitively expensive for even limited voice requirements.

The Commission proposes a mechanism of accommodating current incumbents who are compelled to relocate whereby the prospective PCS licensee would reimburse the incumbent for prudently incurred relocation costs. The Commission also proposes a limited co-primary term for all incumbents, except state and local government incumbents, in order to facilitate the relocation negotiations. This limitation on incumbents' co-primary status will interfere with, rather than encourage, negotiations between incumbents and prospective users, particularly as the expiration of the grandfathering period

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[8] Notice p. 9

approaches. The Commission further speculates that many incumbents could operate indefinitely as secondary licensees, particularly in rural areas. This observation calls into question the need to allocate a large block of spectrum immediately, or to limit the grandfathering period. In addition, the rationale applied to the public safety attributes of state and local government incumbents would apply equally well with many of the other incumbents not afforded indefinite grandfathering under the Commission's proposal.

IV. CONCLUSION

Texas Gas recognizes the legitimate requirements of new technologies to gain access to the publicly held radio spectrum and the FCC's role in administering that spectrum in the public interest. However, we note that coexistence and accommodation have been used in the past to admit new users onto the airways and we disagree with the premise that only by totally clearing a large contiguous frequency band will the FCC provide the necessary conditions for the development of PCS and other as yet undefined emerging technologies. We also question the FCC's arbitrary decision to limit the evaluation of prospective frequencies to a few select bands.

Texas Gas is also concerned that the spectrum proposed to reaccommodate displaced 2 GHz incumbents may prove insufficient in some areas and will most certainly result in additional repeating stations, compromising the performance of those systems. Where possible, private systems should continue to operate on existing frequency allocations in a manner consistent with the required long term occupancy of those frequencies, including prudent expansion and extension of those systems. Should the

Commission go forward with this proceeding, we would urge the Commission to permanently designate all incumbents as co-primary users.

Finally, Texas Gas requests that the Commission defer final disposition of this proceeding until the status of government-held spectrum is decided. Should sufficient spectrum convert to public use, both incumbent and prospective licensees could be spared substantial unnecessary costs.

WHEREFORE, THE PREMISES CONSIDERED, Texas Gas respectfully requests the Commission to consider these comments in acting on the subject Notice

Respectfully submitted,

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Dated June 3, 1992